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Besides the above distinctly professional courses, the Institute offers scientific courses of a less technical character, designed to give students a preparation for business callings. A four years' course in biology, chemistry, and physics has been established, as preparatory to the professional study of medicine.

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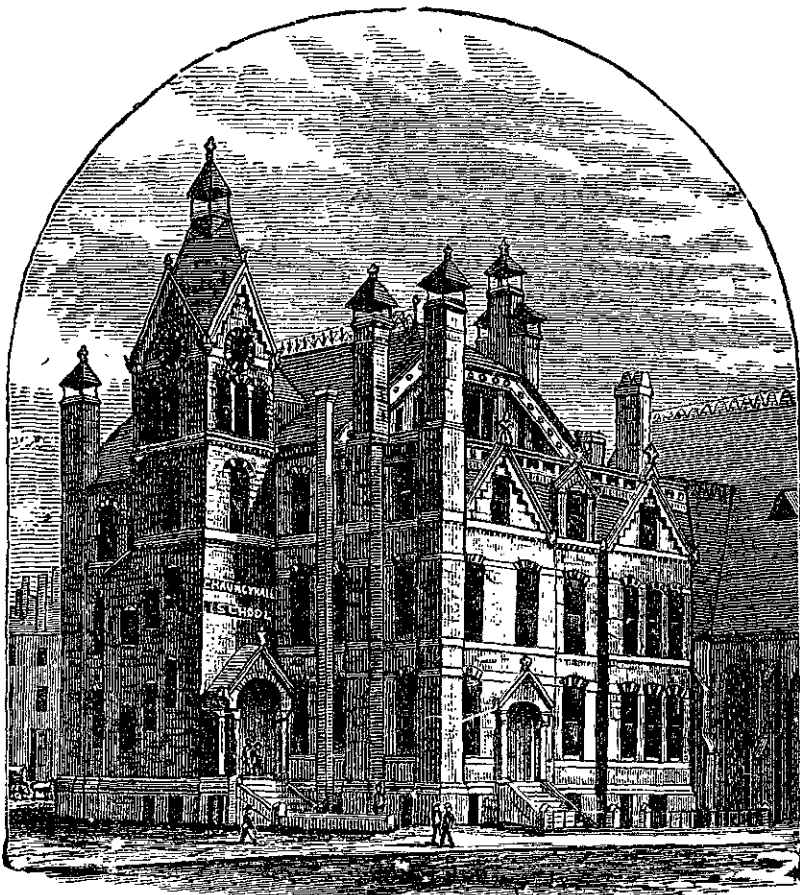
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The Tech.

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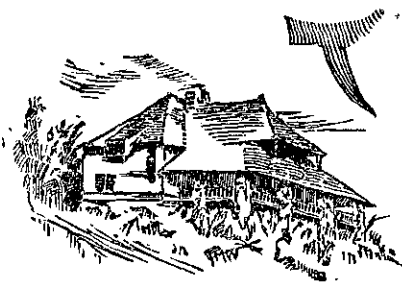
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HE preparations for Class-day are now being actively made, and the committee desire that all members of the Senior

Class shall pay their assessment at the earliest possible moment. The exercises will be about as described in the last TECH. A committee on graduation exercises has been appointed by the Faculty, and has held several conferences with the class committee. It is the intention of the Faculty to make the Commencement exercises a little more entertaining than heretofore. An exhibition of work done during the current year, such as drawings, models, and apparatus of instruction, is to be made a recognized feature of the day. The reading of abstracts of theses and the presentation of diplomas will take place as usual, beginning at 3 P. M. At some time during the day all the professors and officers of instruction will be in their class-rooms and laboratories, giving an opportunity for students to introduce their friends.

Altogether, Class-day, this year, promises to be a very enjoyable occasion. We regret to learn, however, that certain members of the Senior class decline to take part, for reasons not given. It is to be hoped that they will reconsider their determination, or public opinion should force them to. A man who refuses to join in such an affair is a traitor, not only to his class, but to his *Alma Mater*. The Senior Class should be united on this subject.

"Look, then, into thine heart, and write."

WHY is it that the college paper is continually appealing to the students for contributions, when many of the students themselves feel that it would be both a pleasure and a benefit for them to write? When asked, they say: "Yes, I am interested in the welfare of the paper. I would like to see myself in print, and can appreciate the fact that the practice of writing for the paper would in time enable me to write more clearly and easily. But what is there for me to write about?" To such we say, "That is best which lieth nearest," and though you may not "shape from that a work of art," you will have genuine feeling in your work, and that will go far toward making it good. Express your thoughts in a simple, straightforward way, and you will add to their interest and value.

The summer vacation is sure to give opportunities for writing. Why not try your hand, then? Give some of those school and college reminiscences of which your mind is full; tell about your experiences on that vacation trip; do up the characters that were at your boarding-house; if you feel inspired, put into verse your feelings toward the fair girl whose picture is in your watch-case. Above all, don't grumble and find fault with the paper, but suggest improvements in written communications. If

there are not enough sporting notes, locals, or scientific articles, hand in such as you can, and help us out. There is no cover to the slide in the contribution-box.

THE Senior Ball, the social event of the Institute year, has passed pleasantly and successfully. The absence of Seniors was not so general as in previous years, yet comparatively few were present. Why were no more present? The ball was given in their honor, everything was done for their enjoyment, and it would seem discourteous for them to be absent. *But* thesis-work must be completed, and the final examinations are near at hand. The Senior is compelled to stay at home. Therefore the Senior Ball fails to meet the purpose for which it is designed. The Senior Ball should be identified with the graduating class, and should be so arranged that the class in whose honor it is given could show appreciation of the honor. Clearly, the *time* of the occurrence is at fault, and, though there are objections to giving the Senior Ball in connection with the Class Day exercises, the suggestion is worthy of consideration. Then, those for whom it is designed could show their appreciation of the feeling that has made and sustained this custom by being present, and they could enter into the enjoyment of the occasion unharrassed by thoughts of incomplete thesis-work and examination to come.

IT seems rather strange that with the comparatively large number of Exeter, Andover, and St. Paul's men at the Institute, especially the former, the matter of forming Exeter, Andover, and St. Paul's clubs has never been mentioned. In many of our colleges and institutions such clubs have been formed, and great benefits, in several ways, have been derived from them. By forming them here, the Institute is brought into prominence in one way, as her name, more or less, is brought to the eyes of Exeter, Andover, and St. Paul's men, who

are studying to enter some college or institution, but have not yet decided upon any one in particular. We might, at least, be able to obtain *some* good men in that way, if not a large number. Secondly, the schools derive benefit from them, and we are sure that the graduates who are here now want to see their old schools prosper,—in the fact, that their names are brought before the public. Lastly, they are a good thing for the fellows themselves. Much social enjoyment can be had from the renewal of old friendships and associations, and we think such clubs would do good all around. It may seem, and probably is, rather late in the term to start up now; but a beginning can be made by the talking up of the matter among those interested, and the formation could be deferred until next fall.

THE year is nearly over, and soon will freshman, sophomore, and junior leave the stately halls of the Institute in peace and quite for the time of four months. In what way will they spend their vacations? Some will visit the seashore or other summer resorts; a few will go abroad; many will return to the homes of their fathers, and rusticate (*i. e.*, making up conditions) in calm retirement. Quite a number will probably find some employment in the profession of their studies here, and thereby gain some practical experience. This is a most excellent plan, and that undergraduates may adopt it is one reason why our summer vacation is so long. The student who has been professionally employed during the summer, returns to the Institute in the fall far better equipped to make good use of his books from having seen some of the practical side of his future work.

WE call the attention of our readers to the offer of the Alpha Tau Omega of a twenty-five-dollar cup to be given to the player who makes the best batting record for this season. This ought to stimulate the members of the team to earnest effort to improve where improvement is most necessary.

The Back of the World.

There is something to me strangely weird, strangely weird,

In this orb, with its mystery furled;
But I wonder most how it is steered, it is steered,
Down there at the back of the world.

If it's true that the earth is a sphere, is a sphere,
Then geography shows a strange lack
In providing no place for to steer, for to steer,
By neglecting to hunt up a back.

We are taught in our books there's a pole, there's a pole,
Though its is-ness is doubtful, I ween;
But its back, I declare on my soul, on my soul,
Is a thing that my fancy has seen.

It is far, far away in the East, in the East,
Where the ossified lulla-bird sings,
With a squeaking that ought to be greased, to be greased,
At the ultimate backness of things.

Where the epitaphs leer at the crows, at the crows,
And the pachyderm giggles in glee;
Where the fungus in pain loudly howls, loudly howls,
The abnormal effects of a spree.

Save this, all is still unto death, unto death,
As the corpulent silence stalks by;
The redolent leek holds its breath, holds its breath,
And strangles a tear in its eye.

Here an almanac joke in disguise, in disguise,
Is waiting for victims to grow;
And hand-organs mourn the demise, the demise,
Of the author of "Beautiful Snow."

Two lolly-gags spoon on the shore, on the shore,
Where the sea-urchin polishes boots
For ocean swells, fresh from the store, from the store,
Where signs try to prove that "Spring Suits."

Oh, were I a Backling back there at the back,
Where never a human did pace,
All alone, out of range of the strikes, of the strikes,
I would gush o'er the peachblow vase.

I. W. L.

Leona.

YOUTH is sad and gay; because of this dual nature it can hope. Childhood lives in the present; age in the past; but youth in the future.

To Piero the future opened in a long vista,—a sunny, shady, vine-clad arbor, where the leaves rustled applause when stirred by the lightest winds; where the rich, purple clusters of success hung just within his ready grasp; where he loitered carelessly along by the side of fair

Leona. The future was a very pleasant thought to loving Piero; he was still young—he could hope.

He smiled when he thought of the winds moving the listless leaves into applause; it seemed to him a very quaint conceit. Applause was what he loved best in all the world,—next, of course, to Leona; and he wove the idea into a very passable sonnet, which, however, he was as yet too modest to present to the dear one. Her applause he had never tasted, but he felt sure he should attain it sometime. Meanwhile he would wait and hope!

It was some consolation that nightly he had the opportunity of making love to her under the safe cover of the footlights. There, before the audience, she was as responsive as his yearning heart could wish; and when the audience applauded his love-making, Piero was, perhaps, the only one who knew that it was not acting at all, but simply the irrestrainable outpouring of a real emotion. Still, acting or not, the audience liked it, and their approval made each evening's performance a fairy night of joy to Piero.

"Well, that is very good!" he would say to himself, when pit and gallery rang again; "but presently *she* shall praise me *too*!" It was for that he worked—that and her love;—he knew they would come together.

There was one person in the world whom Piero regarded as an enemy; in other words, he had a rival in his endeavor to engage the affections of Leona.

Sometimes it seemed to Piero that he could kill Giuliano, so fierce would his anger and hatred wax against the possible usurper of his place,—a place which at such moments he would not acknowledge as not his, but to which at other moments it would have seemed too high a fate ever to attain himself. Never could he get away from the trite consciousness that Giuliano could boast of great attractions, and so might win a favor to which he himself laid earnest claims. While that consciousness should last, Piero could never but be an enemy to Giuliano.

Perhaps Giuliano looked upon Piero with

quite as inimical a glance; for occasion never offered to put a slight on Piero but it was seized on greedily; so that, aside from his gnawing fear lest Giuliano should succeed, Piero had come to hate the older man on his own more personal account. It was certainly a relief that Giuliano took the character of the villain in the plays, for Piero could infuse an almost unearthly passion into his glance of hatred at the end of the fifth act, where, of course, the villain was always found out, and subjected to indiscriminate objurgation.

Piero's acting had thus, what with his love and what with his hate, become little more than a free out burst of all the pent-up emotions of his life; and his success was already causing his heart to throb with a new hope, and an access of determination. Many syllables had dropped, as if involuntarily, from Leona's lips which he knew could be only the forerunners, unless, perhaps, even the accompaniment of some warmth of feeling for him. A movement of the hand, a posture of her divine form, a word unsaid, or a glance not yet permitted, had come to be to him but letters in an alphabet which he was fast deciphering. No longer, even in his rashest moments, did he fear his rival's power,—rival no longer, but hated more unreasoningly, more deeply than ever. Giuliano had recognized, but with a dizziness too uncontrollable for drawing back, the precipice on which he stood, and madly plunged to the bottom of what seemed must be hopeless love. The leap once taken, the fall not fatal, his ready mind, practiced in the portrayal of villainy, contrived a thousand petty annoyances for the favored Piero, whose hatred, therefore, burned more angry day by day.

One night when Piero was putting the last touches to his costume for the play, his mind was occupied with the brightest hopes; and as he once again softened the carnation of his cheek with the hare's-foot, he smiled into the glass and whispered, "To-night shall I be praised by her?" and the answer, "Yes!" must have been in his heart, for with a light step he went out into the corridor and down the stairs.

It was a bare, sordid place here behind the stage, filled with a stifling smell that came from paint, and gas, and dirt; but Piero breathed deep of the thick air as he went down past Leona's dressing-room. The night was hot, and a cloth of some heavy green material, which was hung in front of the open door way, was swinging in the wind that passed through the room from out of doors. Just as Piero reached the door the cloth blew outward, leaving a narrow crack, through which the lover's glance shot involuntarily.

"My God!" he cried beneath his breath, and while his heart stopped beating for an instant, and then rushed on with a tumultuous bound. "My God!" was all he could think; for he had seen, not what he had thought to see—a lovely girl, with golden hair, and a fair brow and cheek, and neck and arm; but in her place a horrid hag, so nearly bald that the scanty hair stood separated like stiff, white bristles on the shining pate, and a wrinkled, stained, and mould-patched shoulder.

A moment he stood there; his sluggish blood did not run fast enough to make it possible to move.

The curtain blew aside again, while he still remained rooted to the spot; but his heart beat no faster now to see Leona as he always saw her,—her hand upraised among her golden tresses, a soft, embroidered shawl disposed about her shoulders.

His wild laugh as he continued his way along the passage rung jarringly through the wings and out upon the stage; even the audience were chilled by the reverberations of a sound more like a shriek than laughter. The cry wound itself into their souls, and made them indisposed to mercy when Piero, later, while the play was in progress, slipped a little in his part; and when he once failed to respond as usual to some movement of Leona's, a failure which made him seem brutal, a hiss from the pit curdled his blood.

The deadly sound rose and gathered strength, till the embittered actor would have been glad to sneak away from the sight of all who had

began to know his shame. Anger rose in his heart at Leona; that she should have fooled him so completely made him blush with mortification and disappointment; and his flashing hatred for Giuliano, which had begun in fear lest Leona should be lost to himself, grew harder and brighter now that he thought he knew Leona's real nature.

Just at the moment when the hiss arose from the spectators, a wild idea of vengeance and satisfaction was conceived in the brain of Piero. What revenge could be worse than to bring about a marriage betwixt Giuliano and the hag who called herself Leona? Think of the rage and fatal disappointment in the new husband when he should discover what Piero had barely escaped—a declaration of love, by discovering to-night. And then, Giuliano should know that Piero had brought about the marriage, with all knowledge of the horror of the bride beforehand, in revenge for Giuliano's insults! What hell for a husband worse than that?

More merciless, because they knew with what rapt ardor their hero could take the lover's part, the audience gave vent to jeers and laughter at the coolness of Piero; and to make bad matters worse, Giuliano now entered, and cast upon the distracted man a glance of deriding exultation. It was more than Piero could bear. Forgetting his position, his love, his future, his revenge, he fled from the stage; and, pursued even here by the harsh sounds from the audience, sought some brief respite from the fierce burning of his passions by swallowing glass after glass of wine in a retreat frequented by actors near the stage-entrance of the theater. Half calmed at last, by the fumes of the liquor, from his first overmastering agony of pain, his mind returned with more dire certainty to his scheme of revenge on Giuliano.

Little by little, as he sat there buried in his consciousness of revengeful desire, torn by brief emotions that succeeded one another with ever more disastrous intensity, his brain, stimulated by the turbulence of his heart, worked onward to a completed scheme of satisfaction. Word by word, sentence by sentence, he beheld his

plan written in fiery characters upon the scorched page of his spirit. No fear, he said to himself, with a harsh calmness that stung him even at the moment as if it had been ashes on a blistered burn—no fear that such characters would be soon effaced. Not till his soul had yielded to the consuming flames of hell, could those fiery letters become indistinguishable.

* * * * *

“Puisqu'ici toute chose
Donne toujours
Son épine ou sa rose
A ses amours.”

Piero sung sorrowfully as he loitered along the road at dusk; he must be back in time for the performance, but as yet there was no hurry.

“‘Son épine ou sa rose,’”——

that line of Hugo's haunted him. A wave of weakening regret flowed over him that he should have accomplished the ruin of his life's happiness. Long ere this, almost before he had finally succeeded in bringing about the marriage of Leona and Giuliano, he had begun to repent of his fixed desire; but it was his heart that had begun to relent,—his brain still held with grim tenacity to its purpose. Many a time had Piero, when simulating love for Leona, felt again an almost intolerable twinge of jealousy, even though he was bending all his powers to get Giuliano to be successful with her. With unremitting determination he siezed all circumstances, and bent them to his will; while he was growing more conscious every day that his love for Leona was not dead,—had only received a frightful shock, which, nevertheless, it had survived. Many a time he barely had been deterred from throwing himself helplessly at Leona's feet, and begging her to have mercy upon his quivering heart; but the thought of Giuliano would come to his mind, and with a perversity so strange as at times almost to make Piero believe himself insane, the thought of perfect vengeance persisted in suggesting itself only in the old form. It was impossible for Piero to think his rival's love so pure, so deep, so unselfish, so spiritual, as not to be horribly, fatally shocked at the suddenly

discovered fact of his wife's ugliness; nor could he imagine any position more utterly humiliating for a man of Giuliano's caliber and instincts than to feel that his rival knew how fully he had been duped. Piero's own love, every succeeding day proved more absolutely, had survived a discovery that could scarcely but be the death of Giuliano's.

So, gloomily, in the deepening twilight, Piero stalked along.

“ ‘ Son èpine ou sa rose. ’ ”

The line remained a veritable presence. The twittering of the birds beyond the high wall that confined the narrow lane, already grew fainter at the drowsy hour; while the only half-heard calls of laborers bringing back their oxen to the barns; the cool southing of the wind; the purple quiet of the air,—all brought to his heart a longing that had never been so urgent as now. The deadening dusk still called to mind the fact that he should be returning to the theater; but still he dallied on. There was at the foot of this hill a little stream, with an old Roman arch still spanning its gliding waters; he would just reach that, and then he would retrace his steps.

“ ‘ Son èpine ou sa rose. ’ ”

“Yes,” he whispered articulately, as if to give some uttered statement to which he could oppose himself; “it was the thorn and not the rose I plucked for my love; always the thorn,—always the thorn. And now it pierces my own heart; I plucked a thorn for her, and now fling myself upon it.”

Suddenly a low cry smote upon his languid ear; a splash,—and then a shriek! At once he sprang forward, and leaped from the bridge upon the low margin of the stream. A faint, yellow gleam in the water rose to the surface,—rose, and betrayed itself a streaming mass of tawny hair. Before it could sink a second time Piero threw himself into the water, seized the trailing locks, and with the strong strokes of an habitual swimmer brought back to land the lifeless body of a woman.

* * * * *

“Leona!” he cried, when she at last opened her eyes.

“Piero!” she softly uttered, as if with love; then she remembered, and raising herself to a sitting posture, notwithstanding her extreme weakness, she cried “O Piero! O Piero!” and buried her face in her hands. In Piero's anxious haste to recover her from the drowning swoon in which she had lain, her robe, light and loose this warm night, had slipped away from her shoulder, and the wild, glowing mass of hair hung heavy over her smoothly rounded arm and neck.

A glorious joy bounded up in Piero's heart! He had been mistaken; it was some one else he had seen on that horrible night! Leona was beautiful, though he had not believed it; his love had outlived the necessity for her being beautiful, but welcomed now none the less warmly the grateful fact that she was so. Unattacked yet, in this supreme moment of joy, by the accusing thought that she was another's bride, Piero flung himself down before her, and, lifting her head with both hands, cried:—

“Leona! Leona! I love you!”

It was not immediately, but after a moment, that she whispered, “And yet you made me marry Giuliano!” in doubt betwixt this proof that he did not love her, and the joy of telling her he did.

“Oh! but I hated him!” burst out Piero, appalled now at the terrible inadequacy of such a statement as proof of what he wished to prove.

“You hated him! you hated him!” she wailed, though still allowing her head to rest upon his hands and his lips to press her cheek; then, like an overwhelming tide, the realization of what his words meant—must mean—for her, rushed over her. She gasped, and made a feeble movement, which, nevertheless, was powerful enough to throw him off; she took a step, and raising her eyes, was for an instant unable to conceal the glow of love that had till now been so deeply veiled, even to herself. But it was in the full knowledge of the inevitable approach of revulsion from love to hate,—in the first

glow of newborn self-respect at its own self-assertion,—in her joy at the divine triumph of her inalienable pride,—in her instinctive welcoming of a new love arising from the ashes of the old,—that she spoke finally, and buried forever the love whose spark had been extinguished. A new beauty seemed to Piero to sparkle in the dewy luster of her eyes, a new halo to rest upon her glorious hair, a new bloom to glow upon her cheek, as Leona said, in tones soft and grave, instinct with conscious womanhood, "I am Giuliano's wife!"

J. G. H.

After the Storm.

I send you some Jacqueminot roses, my dear:
 Reconsider my jilt, I beseech,
 For my heart's in the blossoms; I hope you will hear,
 When I call to heal cruelty's breach.
 But if in your anger you throw these aside,
 And crush them to dust, I pray feel
 That my heart, like the roses, long cannot withstand
 The grind of that pretty French heel.

J. E. S.

Man and Maid.

I.

Man's heart has tutors two—
 His eyes;
 Obedience is due
 Indisputably to
 Them both; then why do you
 Despise,
 A man for *loving two*?

II.

The maiden's heart is fain
 To be
 Sole tutor to her eyne;
 Why obstinately then
 Should bachelors complain
 If she
 Her eyes on one retain?

J. G. H.

Titles of Theses.

THE following are the titles of the theses of the Senior Class:—

CIVIL ENGINEERING.

Louis Reno Cobb; House Drainage.
 Louis Fayerweather Cutter; Instruments used in Barometric Hypsometry.

Fred Eugene Foss and William Frederic Jordan; Design for a Highway Bridge across the Androscoggin River at Lewiston, Me.

Frank Lovering Locke; Railroad Terminal Facilities of Boston.

Alexander Rice McKim; Iron and Steel Permanent Way.

Harry Baker Merriam; Railway Signals.

George Herbert Nye; Sewerage System for New Bedford.

Arthur Graham Robbins; Control of Rivers.

Jonas Waldo Smith; Determination of new Constants for the Formula of Submerged Weirs.

Lawrence Matthews Thacher; Railroad Accidents.

Sidney Williams; A Discussion of some Facts concerning Construction and Maintenance of Way.

Charles Wood; Design for a Superstructure for a Cantilever Bridge over the St. Lawrence River at Lachine, P. Q.

MECHANICAL ENGINEERING.

George Pennell Aborn; Experiments on the Flow of Steam through Orifices.

Birney Clark Batcheller; Design for a Fork-Hanger.

Richard Plummer Borden; A Comparison of English and American Processes of Carding.

John Kingsbury Burgess and Maurice Augustus Vielé; An Investigation on the Tensile and Transverse Strengths of Cast-Iron, and their Respective Moduli of Elasticity.

George Whitlock Farmer; A Description of the Ames Oil Engine, and Results of some Experiments.

Theodore Reno Foster; An Investigation on the Combined Twisting and Bending of Shafts.

Alexander Stanley Garfield and Edward Lillie Pierce; An Investigation of several Formulæ and Tables, Giving the Relation between the Temperature and Pressure of Saturated Steam.

David Lewis Hathaway; The Joy Valve Gear.

Albert Ernest Leach; Results of Tests made on the Harris-Corliss and Porter-Allen Engines at the Massachusetts Institute of Technology.

Elgood Chauncy Lufkin and Edward Furber Miller; Efficiency of Different Coals used for Steam Generating Purposes.

Edgar Huidekoper Mumford; An Experimental Study of the Surface Condenser.

George Frank Reynolds; On the Balancing of the Reciprocating Parts of the Locomotive.

Charles Franklin Richardson; The Effect of Different Temperatures upon the Tensile Strength of Steel Boiler Plate.

J. Frank Seavey; An Investigation of Valve Gears.

Augustus Burbank Stoughton and Charles Dale Turnbull; The Comparative Evenness of Cotton Slivers and Slubber Roving, Manufactured according to the English or American Process.

William Mode Taylor and David Van Alstine; An Experimental Determination of the Pressure on Lathe and Planer Tools.

Charles Herbert Woodbury; Design for the Builder Motion and Driving Mechanism of the Roving Frame.

Vernor Frank Worcester; The Transmission of Power by Rope-Gearing.

William Wesley Varney and Theron Augustus Noble; Injectors.

John McCallom Lawrence; Design for a Hot-Forge Nut Press, with Experiments on the Shearing Strength of Hot Iron.

MINING AND METALLURGY.

Arthur Anthony; The Treatment of Certain Silver Ores from Idaho, Nevada, Utah, and Mexico, by the Process of Pan Amalgamation.

Charles Lincoln Burlingham; The Geology of the Pyrite Deposit at Rowe, Mass.

William Hobbs Chadbourn, Jr.; The Siemens Martin Process of Steel Manufacture.

Walter Renton Ingalls; The Treatment of a Low Grade Argentiferous Blende from the 7-30 Mine, Georgetown, Col.

James Porter Lynde; Lixiviation and Amalgamation of Silver Ores.

James Elisha Simpson; Smelting of an Argentiferous Galena, and Treatment of Matte by the Augustin Process.

Elwood Justin Wilson; Plattner's Chlorination Process.

Fred Ropes Young; Concentration of Calumet Coarse Sand.

ARCHITECTURE.

William Lord Brainerd; A Design for a Union Station for a System of Elevated Railways.

CHEMISTRY.

Orrin Sage Doolittle; Composition of Boston Illuminating Gas.

James Charles Duff; Action of Phosphoric Acid on the Alcohols of the Fat Series.

James Dillaway Lloyd; The Cracked Oils of Petroleum.

Carrie Belle Kenney; Investigation of the Methods used for Determining small Amounts of Illuminating Gas.

Arthur Amos Noyes; The Action of Heat on Ethylene.

Lucius Kimball Russell; Action of Cochituate Water on Galvanized, Brass, and Kalamined Pipes.

Edward Sanborn Foss; The Action of Nitric Acid on the Substituted Aromatic Amides.

Wilson Henry Low; Manufacture of Aluminum, and Study of its Sulphur Compounds.

ELECTRICAL ENGINEERING.

Dana Prescott Bartlett and Harry E. H. Clifford; On the Electrical Transmission of Power.

William Lester Church and Charles Morris Wilder; An Experimental Study of the Weston Incandescent Dynamo.

Francis Henry Crane and Henry Parker Merriam; Compound Wound Dynamos.

Edward Everett Higgins; The Brush Storage Battery.

Fred Lewis; Induction.

William Edwin Shepard; On the Inverse Electro-motive Force of the Electric Arc.

Theodore Stebbins; Underground Cables.

BIOLOGY.

Charles Cutler Doe; On the Regeneration of the Mucous Membrane of the Uterus of the Cat.

James H. Mirrlees.

IT is with the deepest regret that we record the death of James H. Mirrlees, of the class of '87. After a short sickness of only four days, he died of scarlet fever, on Tuesday, April 27th, at nine o'clock in the evening. His home was in Glasgow, Scotland, he being one of quite a large family. He attended the University of Glasgow previous to his entrance into the Institute, last year. He was a very fine scholar, and all his Professors speak in the highest terms of his attention and application to duty, and his high moral character. Quiet and unassuming in his manner, always ready and prompt to help one in time of need, he has made friends with all whom he has met. He was one of the most popular fellows in his class; nothing can be said against him, and too much cannot be said for him.

By the kindness of the Rev. Phillips Brooks, at whose church Mr. Mirrlees was a regular attendant, services were held in Trinity on Thursday, at ten o'clock, the Faculty kindly suspending recitations for the Junior class. Mr. Brooks conducted the services and the Glee Club furnished music. The body was then taken to Forest Hill and placed in a vault, until it can be carried to Scotland. The pall-bearers from the class and the Theta Xi Fraternity were Messrs. Todd, Shepard, Harris, Cobb, Shortall, Banes, Sprague, and Draper.

Whereas the Almighty, in his infinite wisdom and mercy, has taken from our midst our beloved friend and brother, James H. Mirrlees, the Delta Chapter of the Theta Xi Fraternity desires to give enduring expression to its appreciation of his high character and his earnest services as a true brother; therefore be it

Resolved, That by his death the Fraternity loses an invaluable brother; one who was of unfailing courtesy, faithful to his duties in life, ever diligent in his work, in all respects upright and genial, and who won the deep affection and esteem of all with whom he had been connected.

The recollection of our truest brother will never be forgotten. And be it

Resolved, That we tender our profound sympathy to his family, and commend them to the all-sufficient care of Him who in his wise providence has seen fit to send this grievous affliction upon them. And it is further

Resolved, That copies of these resolutions be sent to the family of our late brother, and that they be printed in THE TECH.

WARNER J. BANES,

TIMOTHY W. SPRAGUE,

FRED THOMPSON,

For the Chapter.

Inasmuch as our omnipotent heavenly Father has in his perfect and all-seeing wisdom deemed it best, for the carrying out of his divine plans, to summon from his daily tasks our dear friend and classmate, James H. Mirrlees, and place before him a brighter and eternal service in his heavenly kingdom.

Resolved, that we, the members of the class of '87, M. I. T., do feel deeply bereaved in the loss of so lovable and noble a character from our midst; one whose quiet, yet firm perseverance in the right, and whose earnest and conscientious labors in the class-room, have won for him the respect and honor of both classmates and instructors. His memory will be, as his presence has been, a gentle influence toward higher and nobler purposes.

That we offer as fully as possible our heartfelt sympathy to the members of the home so suddenly and sadly darkened.

F. C. TODD,

W. L. HARRIS,

F. E. SHEPARD,

M. E. COBB,

J. L. SHORTALL,

For the Class.

F. E. SHEPARD,

H. C. SPAULDING,

F. C. TODD,

F. M. WAKEFIELD,

B. C. LANE,

For the Society.

Boston Blues, 9; Technology, 0.

The nine played the Boston Blues, of the New England League, on the Union Grounds, April 27th. Thomas was batted heavily, while the Techs only secured two hits off Fitzgerald. Clement caught well, and Carleton played a pretty game at second. Devens on third was very raw, and played poorly. Billings' play in center was not very good. He is much too careless in catching a ball. A pretty double play was made by Thomas, Clement, Devens, and Carleton. The summary:—

BOSTON BLUES.

	A.B.	R.	IB.	T.B.	P.O.	A.	E.
McLaughlin, 2b.	5	0	1	1	2	1	0
U. Sullivan, l.f.	5	2	2	2	0	1	0
Hartnett, 1b.	4	3	4	5	8	0	0
M. Sullivan, r.f.	5	1	1	1	0	0	0
Earle, 3b.	5	0	0	0	1	1	1
Murphy, c.	5	1	2	2	16	4	1
Riley, c.f.	5	2	2	3	0	0	0
Shaw, s.s.	5	0	0	0	0	1	2
Fitzgerald, p.	4	0	1	1	0	20	1
Totals,	43	9	13	15	27	28	5

TECHNOLOGY.

	A.B.	R.	IB.	T.B.	P.O.	A.	E.
Thomas, p.	4	0	1	1	3	8	2
Carleton, 2b.	4	0	0	0	2	3	0
Clement, c.	4	0	1	1	11	2	3
Devens, 3b.	3	0	0	0	2	2	2
Russel, s.s.	3	0	0	0	0	0	1
Billings, c.f.	3	0	0	0	1	0	1
Marcy, r.f.	3	0	0	0	0	0	0
Kendricken, l.f.	3	0	0	0	2	0	0
Ewen, 1b.	2	0	0	0	6	0	0
Totals,	29	0	2	2	27	15	9

Earned runs — Blues, 1. First base on balls — by Fitzgerald, 1; by Thomas, 1. Struck out — By Fitzgerald, 17; by Thomas, 5. Passed Balls — Clement, 4. Wild pitches — Fitzgerald, 1; Thomas, 3. Umpire — J. Sullivan.

Beacons, 9; Technology, 6.

The nine played the Beacons at Melrose, May 1st. The team is improving in its work. Thomas pitched a good game, striking out eleven of the Beacons, and Clement supported him in good shape. Carleton played a fine second base, and has improved considerably. Ray was rusty at short, and made a glaring error, an overthrow to first, and also held the ball too long in one instance, when he might

have thrown a man out at third. Ayer had an off day, and played miserably at third. Ruffin, in left, proved a mascot; he brought in three runs and accepted every chance offered. Billings' center field play was extremely poor, and he made an error in the eighth, which, with Thomas' muff of an easy fly, cost the Techs the game. Ewen, Clement, and Thomas did all the batting for Tech. Ewen made one hit which should have yielded two bases, but he only obtained one, by very poor base-running. The boys need improvement in base-running. Ayer was the only one to steal second on Richardson, which he did twice. Twombly played a miserable game for the Beacons, and did not succeed in making a base hit. The score:—

BEACONS.

	A.B.	R.	IB.	T.B.	P.O.	A.	E.
Richardson, c.	5	1	1	3	9	7	1
C. G. Merrill, 2b.	4	2	2	2	6	2	0
G. P. Merrill, 1b.	4	3	2	2	10	0	0
Fredericks, s.s.	4	3	2	3	0	1	0
Rogers, l.f.	4	0	2	2	0	0	2
Twombly, 3b.	4	0	0	0	1	0	3
H. L. Ayer, c.f.	4	0	0	0	0	0	0
Proctor, p.	4	0	0	0	1	13	0
Austin, r.f.	4	0	0	0	0	1	1
Totals,	37	9	9	12	27	25	7

TECHNOLOGY.

	A.B.	R.	IB.	T.B.	P.O.	A.	E.
Thomas, p.	5	0	1	2	0	13	2
Carleton, 2b.	5	0	0	0	2	2	0
Clement, c.	5	0	2	2	14	0	2
Ayer, 3b.	5	0	0	0	0	0	3
Ray, s.s.	2	1	0	0	0	1	1
Marcy, r.f.	4	0	0	0	0	0	0
Ruffin, l.f.	3	3	0	0	1	1	0
Ewen, 1b.	3	2	2	2	6	1	0
Billings, c.f.	3	0	0	0	1	0	2
Totals,	35	6	5	6	24	18	10

Earned runs — Beacons, 1. First base on balls — By Proctor 5; by Thomas, 2. Left on bases — Beacons, 6; Technology, 8. Double play — Fredericks, C. G. and G. P. Merrill. Passed balls — Richardson, 2; Clement, 1. Wild pitches — Proctor, 5; Thomas, 2. Struck out — By Proctor, 9. By Thomas, 11. Umpire — J. P. Green.

Still the wicked pitcher will not soften,

But persists in playing as he likes;

And our wearied nine, we hear, he often—

Oh, so often — puts all out on strikes.

To Dromio.*(See last TECH.)*

Take that dainty piece of linen
 That is hanging on the wall,
 Fondly brush away the dust, then gently fold.
 When you lay aside your flannels,
 Sentiment will burst its trammels,
 And you'll find it very handy for a cold.

AUTHOR OF ROT.

Noticeable Articles.

THE *London Spectator* for April 17th has a good notice of a very important and interesting philosophical work, just translated into English, the *Microcosmus* of Lotze, one of the leading German philosophers of the day. To the students of politics and history, who, however much they may admire the vast and comprehensive industry of Mr. Herbert Spencer, yet find his system essentially shallow and unsatisfactory, this book of a profound thinker of a totally different order will be a great boon. The parts that will interest such students are the last three books, entitled "History," "Progress," "The Unity of Things." "We call attention," says the reviewer, "to the thoughtful review of the history of the world which closes the seventh book, and to the discussions on truth and science, work and happiness, beauty and art, the religious life, and political life and society, which make up the eighth book. This book might well be called 'A Statesman's Manual.'"

It is a sign of the progress which the higher education of women is making, that this difficult book has been translated—exceedingly well, says the reviewer—by two young women, Miss Elizabeth Hamilton, daughter of the learned Scotch philosopher, Sir William Hamilton, who seems to have inherited some of her father's ability, and Miss Constance Jones, a graduate of Girton College.

Since noticing the paper of Dr. Roose, on Health, I have fallen in with a little book on one branch of the same subject, the relation of food to health, which I want to bring to the notice of the readers of THE TECH, as well worth to any one the ninety-five cents, which, with the proper discount, it ought to cost. It is the fourth edition of "Food and Feeding," by Sir Henry Thompson, an eminent London physician. Most cookery-books are written by cooks, and their aim is to tickle the palate; but here is what might be called a cookery-book by a philosopher, whose

aim is the promotion of health,—physical, moral, and intellectual. Sir Henry's idea is, that in respect to food and feeding, we are still in the empirical pre-scientific stage; the stage which corresponds to alchemy as compared to chemistry, or astronomy as compared with astrology. Man has been an omnivorous eater, and has thereby gained a considerable amount of valuable experimental knowledge, though he has eaten and drunk, and still eats and drinks, a great many things that do not agree with him, with a vast result of hereditary and transmitted disease. The remedy for the difficulty is to bring the subject within the sphere of exact scientific observation and experiment, and this our author thinks is now possible, with the help of modern chemistry and physiology. "For it is certain," he says, "that an adequate, practical recognition of the value of proper food to the individual in maintaining a high standard of health, in prolonging healthy life (the prolongation of unhealthy life being small gain either to the individual or to the community), and thus largely promoting cheerful temper, prevalent good nature, and improved moral tone, would achieve almost a revolution in the habits of a large part of the community."

Dr. Thompson is not a man with a crotchet, no bran-bread philosopher, or ally of the American transcendentalist, whom old Carlyle described as "that moon-calf with his potato-gospel." He is an advocate of good cooking, and plentiful and savory food; but he looks at the whole subject with the eye of a physician and a physiologist, and his account of the relative nutritive value and digestibility and economy of different kinds of food, and his practical directions for preparing them, will prove valuable knowledge to every one, and will be better than many cook-books to the practical housekeeper.

The author's remarks on drinking and smoking are worth noticing as the results of wide experience, and the opinions of an impartial observer. "I am of opinion," he says, "that the *habitual* use of wine, beer, or spirits is a dietetic error, say for nineteen persons out of twenty. In other words, the great majority of the people at any age, or of either sex, will enjoy better health, both of body and mind, and will live longer, without any alcoholic drinks whatever, than with habitual indulgence in their use, although such use be what is popularly understood as moderate. But I do not aver that any particular harm results from the habit of now

and then enjoying a glass of really fine, pure wine, — and rare as this is, I do not think any other is worth consuming—just as one may occasionally enjoy a particularly choice dish; neither the one nor the other, perhaps, being sufficiently innocuous or digestible for frequent, much less for habitual, use. Then I frankly admit that there are some persons—in the aggregate not a few—who may take small quantities of genuine light wine or beer with very little, if any, appreciable injury. For these persons such drinks may be put in the category of luxuries permissible within certain limits and conditions, and of such luxuries let tobacco-smoking be another example. No one probably is any better for tobacco, and some people are undoubtedly injured by it, while others find it absolutely poisonous. Some few indulge the moderate use of tobacco all their lives without any evil effects, at all events, that are perceptible to themselves or others. Relative to these matters, every man ought to deal carefully and faithfully with himself, watching rigorously the effects of the smallest license on his mental and bodily states, and boldly denying himself the use of a luxurious habit if he finds undoubted signs of harm arising therefrom."

The English magazines for April are naturally very full of papers on the absorbing Irish question. One of the best is in the *Nineteenth Century*, by Mr. Lecky, the eminent author of that capital book, "The History of Rationalism in Europe," and of the "History of European Morals." The chapters on Ireland in his "England in the Eighteenth Century" are very valuable. He is himself an Irishman.

W. P. A.

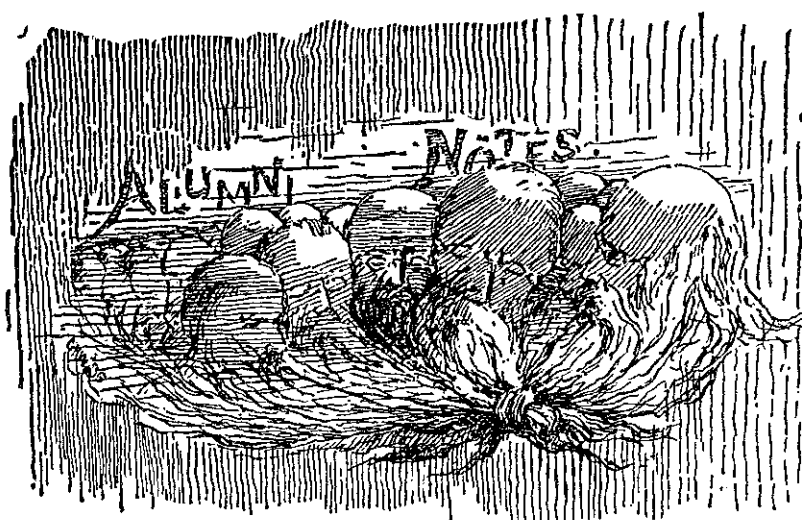
TECHNICAL.

The raising of the approach girders on the south side of the Forth Bridge has had to be postponed a day or two, owing to the bursting of one of the hydraulic jacks. There are seven spans ready to be lifted; and as each span weighs 210 to 220 tons, there is a total weight of close upon 1,600 tons to be operated upon by the hydraulic machinery, taking into account, of course, the other material. The total length of the girders to be raised is about 1,200 feet. They rest upon seven piers, which will be built up under them till they have been raised to per-

manent height, of about 150 feet above high-water mark. This will be accomplished by stages of 3 feet 6 inches at a time. The girders will be raised in the first place to that height above the mason-work by the hydraulic jacks, and propped up by blocks of wood. Two courses of mason-work will then be built up under them; and when the mason work sets, the same operation will be repeated. Judging from the rate of progress at the north side of the works, where the approach girders have been raised 20 feet, each stage will occupy eight days, and it is expected that during the summer, the work will progress at the rate of 14 feet per month.—*Engineering*.

A device has been invented by which electricity is made to record the weights indicated upon scales or steelyards, the application being specially designed for the weighing of freight-cars while in motion. It is said that with this device properly applied to the scales, an accurate account can be kept of the weight of every car passing over them, even at full speed.—*R. R. Gazette*.

An engine of singular design has just been completed at the Grant Locomotive Works, Paterson, N. J. Mr. Raub, the patentee, has, it is stated, spent nearly forty years in elaborating the details of the engine. The main idea has been to place the cylinders, fire-box, dome, and all important working parts as near as possible to the center of the engine. The cylinders are vertical and drive a central dummy axle, carrying wrist-pins, from which power is transmitted to two pairs of drivers in front and two pairs behind. The engine carries water and fuel in side tanks, and is intended to run in either direction. Two fire-boxes and boilers are used, and the firing is done from the sides, as in the four-cylinder Fairlie engine. The chimney passes through the dome, and is situated in the center of the engine. Smoke-boxes are situated at each end of the engine, and the products of combustion pass from the smoke-box, by return flues, to a central chamber, and thence into the stack.—*R. R. Gazette*.



Judd Colgan, '77, lawyer, in Indianapolis, Indiana.

H. Furlong Baldwin, '84, supervisor of the Knoxville Division of the Louisville and Nashville Railroad, Lebanon, Ky.

William K. Callahan, '84, member of firm of W. P. Callahan & Co., Manufacturers of Oil Machinery, Dayton, Ohio.

T. C. DuPont, '84, mining engineer and superintendent, Central Coal and Iron Co., Central City, Ky.

Frank M. Haines, '84, assistant engineer N. P. R. R., North Yakima, Washington Territory.

E. C. Hilyer, '84, proprietor of Maverick Iron Works, Newport News, Va.

Geo. F. Lull, '84, student of chemistry in Maine State Agricultural College, Orono, Me.

Edward V. Sedgewick, '84, master mechanic, Second Division, Mexican Central Railroad, Silao, Mexico.

Walter A. Frost, '77, Judge of Municipal Court, Roxbury, Mass.

Capt. J. F. Weston, U. S. A., '84, Commissary Dept. U. S. A., Whipple Barracks, Prescott, Arizona Ter.

Geo. A. Ricker, '86, Buffalo, N. Y., recently elected a Junior of the American Society of Civil Engineers.

"This wants to go into THE TECH," said Gushley, handing the editor a few dozen dreamy stanzas on "Spring Sighs." "I know it does," was the *sotto voce* answer, as the manuscript slid softly into the waste-basket, "but it can't."

The Senior Ball.

ON the night of Friday, April 30th, at 8.45 by the stop-watch, the doors of Odd Fellows' Hall were thrown open, and the many guests who had assembled to do honor to the brave of '86 were ushered to the matrons for the evening—Mrs. Francis A. Walker and Mrs. William H. Pickering. Mrs. Drown, to the regret of all, was unable to be present.

The tasteful orders of dances were distributed during a grand march, and in very quick time the gentlemen had covered the ladies' cards and their own with all sorts of hieroglyphics indicative of future engagements, and the dancing had begun. The music of Mr. Richardson's orchestra furnished abundant inspiration, though light steps and bright faces made such inspiration seem but an after-thought. The only pause in the swift flight of the dances was the refreshing alighting in the supper-room.

The floor-director, Charles F. Richardson, '86, and the committee, especially the chairman, John L. Shortall, '87, deserve much praise for the pleasant and successful way in which was carried out this most important event of our social year, the ball to '86.

At the Tech Supper.

My spirit is dying within me,
And ambition well nigh killed—
With my salary spread before me,
And my cubic contents filled.

But, alas! I can only sit here
With a calm, sardineic grin,
And wish that my name was Morris,
With a patent elastic skin.

Technics.

General Sherwin was examining men for the police force, a few days since, under the new civil service rules. One candidate was asked what four penal institutions there were in Boston. He replied promptly: "The Jail, State's Prison, the House of Industry, and the Institute of Technology!"—*Boston Record*.

AT THE SENIOR BALL.—*Mr. Treadwell (at the close of the dance):* "Really, I've danced so little lately that you see I've almost forgotten how to waltz."

Miss Flightley: "On the contrary, I think you dance *better than ever*." Solemn pause.



A VERNAL PARADOX.

Oh, alackaday the springtime,
'Tis a deadly-sort-'o-thing time;
I will hie me to the bomb-proof in the fort.
When the flowrets are a blooming,
When the annuals are booming —
An explosion always follows the report.

AUTHOR OF ROT.

An unsettled part of Boston — the dust.

S. R. Bartlett, '86, photographed the battalion.

The battalion will visit Fort Warren May 22d.

The Co-operative Society numbers about 600.

Mr. G. W. Davenport, ex-'87, was in the city recently.

The Glee Club has been photographed by McCormick.

Rev. Phillips Brooks has been elected Assistant-Bishop of Pennsylvania.

The Tennis Association now has fifty-five names on its membership roll.

There are about fifty-five men candidates for the degree of S. B.

Mr. Fred R. Young, '86, will be an assistant in the mining laboratory, next year.

The examination of the Lowell School of Practical Design will be Tuesday, May 18th.

The Columbia-Technology ball games were declared off.

The editors and directors of THE TECH have been photographed by Ritz.

The tennis club's back-nets were cut in many places by some mucker, recently.

Mr. Wilson H. Low, '86, has accepted the position of chemist with the Penobscot Chemical Fibre Company, Oldtown, Me.

Why would the proprietors of Young's Hotel make excellent tennis-players? Because they have a good service, and make good returns.

The time during which oysters R good is past. It will not be repast until the opening season comes again.

Many of the Architectual department attended the funeral services of H. H. Richardson, April 30th.

Mr. Charles Wood, '86, will enter the employ of the Boston Bridge Works at the close of the term.

Cross-examinations are usually rather unpleasant,—say Prof. Gray and the second-year physics students.

The Senior Chemists have formed a permanent organization, of which Arthur A. Noyes is secretary and treasurer.

Mr. Howard V. Frost, instructor in General Chemistry, will sail in June for Antwerp, where he will pursue his scientific studies.

Mr. Frederick Fox, Jr., '85, is a candidate for the degree S. M. The subject of his thesis is "Occluded Gases in Iron and Steel."

The Seniors begin to think that *Hastings* is hardly a proper name for their class photographer.

Messrs. Daniell and Hall, formerly of '88, were in town recently, and attended the Senior Ball.

Rev. Phillips Brooks was the first choice of Philadelphia delegates for Assistant-Bishop of Pennsylvania.

Everyone should have attended the orchestra party, which was a most successful close to the dancing season.

The Committee of Arrangements, from the Faculty, for graduation day, consists of Prof. Atkinson, Chairman, and Profs. Niles and Richards.

The Architects beat the Mechanicals April 29th, in the '88 department series. The score was 8 to 7. Ah, there! T square! Rah, rah, rah!

The Boston League Club made more errors in their game with Washington, May 3d, than the Techs have in any game this year; but to do the Bostons justice, they have, in several games, made fewer errors than the Techs have in any of theirs.

Prof. and Mrs. R. H. Richards, assisted by Mrs. Frederick C. Clark, received the third-year Chemists and Mining Engineers Tuesday, the 4th, at Prof. Richards' home, Jamaica Plain.

J. T. Greeley, '88, offers a suitable reward for the return of a pocket-book containing over twenty-five dollars, which he lost at or near the Institute.

The class in Industrial Chemistry visited the Danvers Bleachery at Peabody, April 30th. The party was conducted through the works by Mr. Osgood, of the class of '85.

The sanitary laboratory is to be moved to room 36. Prof. Nichols' private laboratory and the room now occupied by the sanitary laboratory will be made into a recitation-room.

Prof. Richards has invited the Senior Miners and Chemists to accompany him on an excursion through the Pennsylvania region, to visit mines, manufactories, etc. The party will start June 7th.

The '89 battalion has its prize drill in Charitable Mechanic building, Saturday afternoon. Two company and three individual prizes will be awarded. Dancing will follow the drill.

'87, at a class meeting, May 6th, re-elected H. C. Spaulding and T. W. Sprague to represent the class on the Board of Directors of THE TECH.

THE TECH's suggestion that a banjo club be formed has struck fertile soil. All wishing to join such a club are requested to submit their names to W. E. Silsbee, '88.

Where is the traditional sophomoric spirit, '88? Freshmen have been seen wearing tall hats,—perhaps not with entire impunity, but certainly with a great deal of *sang froid*.

Sums of money, and even keys, were stolen from the pockets of the clothes which some of the ball nine left in the dressing-room at the Union Grounds, during the game with the Boston Blues.

The *Courier* says: "Boston can't come up to the Philadelphians in the quantity of amateur clubs, but can leave the Quaker City far behind when it comes to quality. Look at pitchers like Nichols, Riley, Westcott, and Thomas—each one as fine as the best of professionals."

A base-ball nine has been formed in the Architectural department, made up as follows: Brainerd, c.; Billings, p.; Kirkham, 1 b.; Carpenter, 2 b.; Hoppin, 3 b.; Carleton, s.s.; Ray, l. f.; Hale, c. f.; Moore, r. f.

Messrs. Howard, Benton, Kendall, and Maher, formerly studying architecture at the Institute, and Mr. Ely, last year an instructor in the Architectural department, were in the office of H. H. Richardson, at Brookline.

At a meeting of the Base-Ball Association, April 26th, Clement, the catcher of the team (and batter, too), was elected Manager, in place of Currier, resigned. The financial condition of the club was reported as good.

The class of '87 held a meeting, April 28th, to take action upon the death of James H. Mirrlees, and the Society of '87 met directly after for the same purpose. The regular meeting of the Society was postponed to May 14th.

The Society of '88 has elected the following young lady students to membership:—Miss Lillian G. Currier, Miss Annie G. Rockfellow, Miss Adelaide Sherman, and Miss Isabel F. Hyams. The final meeting and annual supper will be at the Parker House, Friday, May 28th.

The *Spirit of the Times*, in its annual review of athletic records, makes Atkinson, '85, the world's champion fence-vaulter, he having cleared 7 feet 3¾ inches in the Hemenway gymnasium in 1884.—*Harvard Crimson*. Mr. Atkinson is now at the Institute in the mechanical engineering department, '87.

Harvard celebrates her 250th anniversary this fall. The oldest colleges in the United States, in the order of foundation, are: Harvard, 1636; William and Mary, 1692; Yale, 1700; Princeton, 1746; Columbia, formerly called King's, 1754; Brown, 1764; Dartmouth, 1769; Rutgers, formerly Queen's, 1770; Hampden Sydney, 1776.

The first annual meeting of the Tennis Association was held in Room 15, Rogers', May 8th. Officers for the ensuing year were elected as follows: President, Solomon Sturges, '87; Vice-President, Russell Robb, '88; Secretary, H. J.

Horn, Jr., '88; Treasurer, Bates, '89; Executive Committee, H. D. Sears, '87, W. E. Mott, '88, and F. W. Hobbs, '89.

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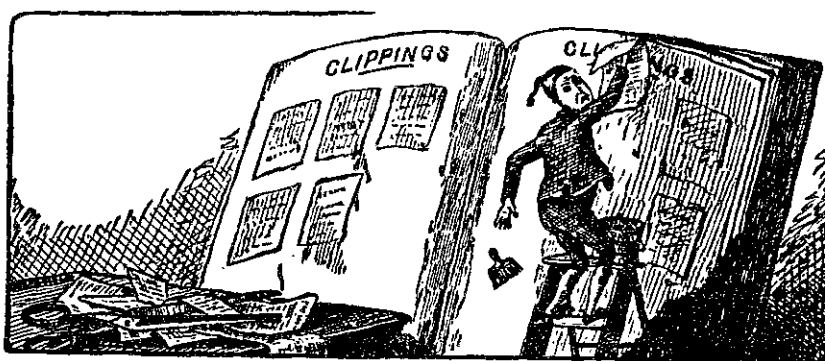
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A WOMAN'S WAY.

"I love you no longer," the maiden cried;
He seemed in despair at the news.
She was a maiden youthful and fair,
While he stood six feet in his shoes.

"I love you no longer," she said once more,
(He looked the picture of woe,)
"Because, my dear, you're *long* enough now,"—
"Over the hills they go."

—Yale Record.

Mrs. Badger: "So you are in favor of Home-Rule, are you?"

Mr. Badger (behind his newspaper): "Y-e-s; it is a very good thing—in Ireland."—Puck.

Senior (asks Prof. a very profound question):

Prof.: "Mr. W. a fool can ask a question that ten wise men could not answer."

Senior: "Then I suppose that's why so many of us flunk."—Ex.

John: "An' what will you be doin', frind, after leaving college?"

Jones: "Well, John, you know there are always plenty of openings for a man of genius."

John (who doesn't see the connection): "Sure enough, sor; but what will *you* be doin', sor?"

—Lampoon

A wheelman had called at a farmhouse for a glass of water, but the pretty farmer's daughter had offered him a glass of milk instead.

"Won't you have another glass," she asked, as he drained the tumbler with a sigh, and appeared to be taking in emptiness with both eyes.

"You are very good," he replied, "but I am afraid I shall rob you."

"Oh, no," with emphasis. "We have so much more than the family can use, that we're feeding it to the calves all the time!"—Boston Record.

At Harvard.—"Nice old gentleman v just bowed to you, Charley; is he a relative?"

"Oh, yeas; he's a father of mine."—Boston Record.

Smith (to Brown, who is escorted by two policemen): "What's the matter, old man—un arrest?"

Brown: "No; I'm under protection. out collecting money for a gas company."—

TO DAISY (WITH A BUNCH OF ROSES.)

This humble offering which I send

May not unworthy be,
If it remind thee of a friend

Who oft remembers thee,
And roses seem an offering meet
For love to lay at Beauty's feet.

I know their splendor all will fade,

As moments glide away;
But what of that? They were but made
To blossom and decay,
Or wake, perchance, a passing sigh
For vanished hopes, and days gone by.

P. S.—The flowers will be sent later in the year, w the price comes down.—Lampoon.

"Father," said Rollo, "what is meant by t intoxication of wealth?"

"Means that money is tight," replied Rollo's father, who had been shinning around all t afternoon with a piece of paper looking for autograph.—Ex.

Little Johnnie (aged seven, to new clergyman): "Didn't you say there was a place whe we shall meet all our friends and relatives whe we die?"

N. C.: "Yes, Johnnie, there is a heav where we shall have life everlasting with o dead friends.

L. F. (thoughtfully): "By George, won't r dad have a hot time of it? He's been marri seven times."

"Fire 97," said a busy hotel clerk to t new porter.

Presently the porter returned looking ve much mussed up.

"I fired him, sorr," he said, "but, begor for jist wan blissed moment I thought he h me."—Life.

FRENCH SHIRTINGS,

English Cheviots,

ENGLISH AND FRENCH FLANNELS,

Silk and Wool, and Pure Silk Shirtings,

For Lawn Tennis, for Steamer Traveling, for Hunting and Fishing, for Railway and Yachting, always in stock or made to special measure, at

NOYES BROS.

DRESS SHIRTS,

For Weddings, for Receptions, for Dinner Parties, with Collars, Cuffs, and Cravats, in the latest English styles.

Plain French Bosoms,

Fine French Plaits and Cords.

Jurors' award for beauty of workmanship and design, and distinguished excellence in the manufacture of shirts.

NOYES BROS.

— ENGLISH —

DRESSING GOWNS JACKETS, AND WRAPS.

LAWN TENNIS SHIRTS,

COATS, and HOSE

Tennis Belts and Caps

in stock and made to measure from elegant styles of

ENGLISH FLANNELS

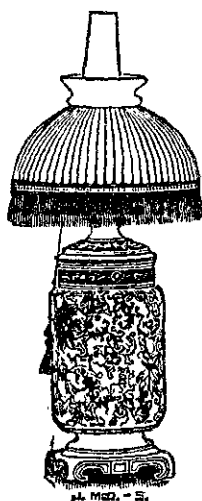
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London Tan Street Gloves, warranted, \$1.35.

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Fine Pottery, Glass, and Lamps.

THE subscribers invite attention to their stock of the above branches, which we dare say is not excelled on this continent. One of our firm visits the Potteries of England, France, Germany, China, and Japan, seeking the best products from original sources. We have also specimens from the best home manufacturers, comprising desirable exhibits of useful and ornamental wares, to which we invite inspection. Six floors, wholesale and retail.

JONES, McDUFFEE & STRATTON,
120 Franklin Street, corner Federal.

N. B.—From the old Wedgwood Pottery we have Plaques, Duplex Lamps, Plates, Mugs, Tiles, Jugs, Coffees, etc., decorated with Boston scenes (including cut of the Tech Institute), which may be found desirable as souvenirs.

Genuine Silk Sponge Towels.

Every Fibre of these SILK TOWELS Guaranteed to be PURE SILK without mixture.

BATHING.

For removing the secretions of the pores of the skin, leaving a healthy surface, Silk Towels are better than anything else known. They should be used as a sponge, with soap and water, or bay rum, and like washes. They are the Best Face Cloth known.

FOR GENERAL HOUSEHOLD AND HOTEL USE.

Wet with pure water (no soap required), in Wiping Table Glassware, Cleaning Paint, Cleaning and Polishing Windows, Cleaning Linoleum Carpets, Cleaning Metal Signs, Cleaning Furniture, Mirrors, and Washing Dishes.

THEY ARE A SUCCESS. THEY ARE VERY DURABLE.

Soft as a new Chamois, never getting hard, to scratch the most highly polished Furniture. Unlike a sponge, which is never clean but once, namely, before it is used, a Silk Sponge Towel can be easily washed, and is then as clean as new. They are an absolute necessity to those who take a pride in their housekeeping.

EVERY TOWEL WARRANTED WHEREVER PURCHASED.

For sale, wholesale and retail, by all the leading Druggists, first-class Dry-Goods Dealers, Ladies' or Gents' Furnishing Stores, and all dealers in Fine Groceries.
Retail Price, 25 Cents each, limited.

GEO. S. BROWN, Inventor.



A Card to Cigarette Smokers.

OWING to the persistent attempts of numerous cigarette manufacturers to copy in part the BRAND NAME of the

"RICHMOND STRAIGHT CUT"

now in the eleventh year of their popularity, we think it alike due to the protection of the consumer and ourselves to warn the public against base imitations, and call their attention to the fact that the original *straight cut brand* is the RICHMOND STRAIGHT CUT No. 1, introduced by us in 1875, and to caution the students to observe that our signature appears on every package of the genuine straight cut cigarettes.

ALLEN & GINTER,
Richmond, Va.

COLLINS & FAIRBANKS,

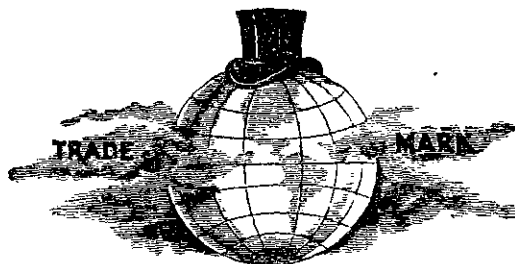
STYLES SPECIALLY ADAPTED TO YOUNG MEN.

Opera Crush Hats,

English Hats,

Silk Hats,

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Leather Hat Boxes,

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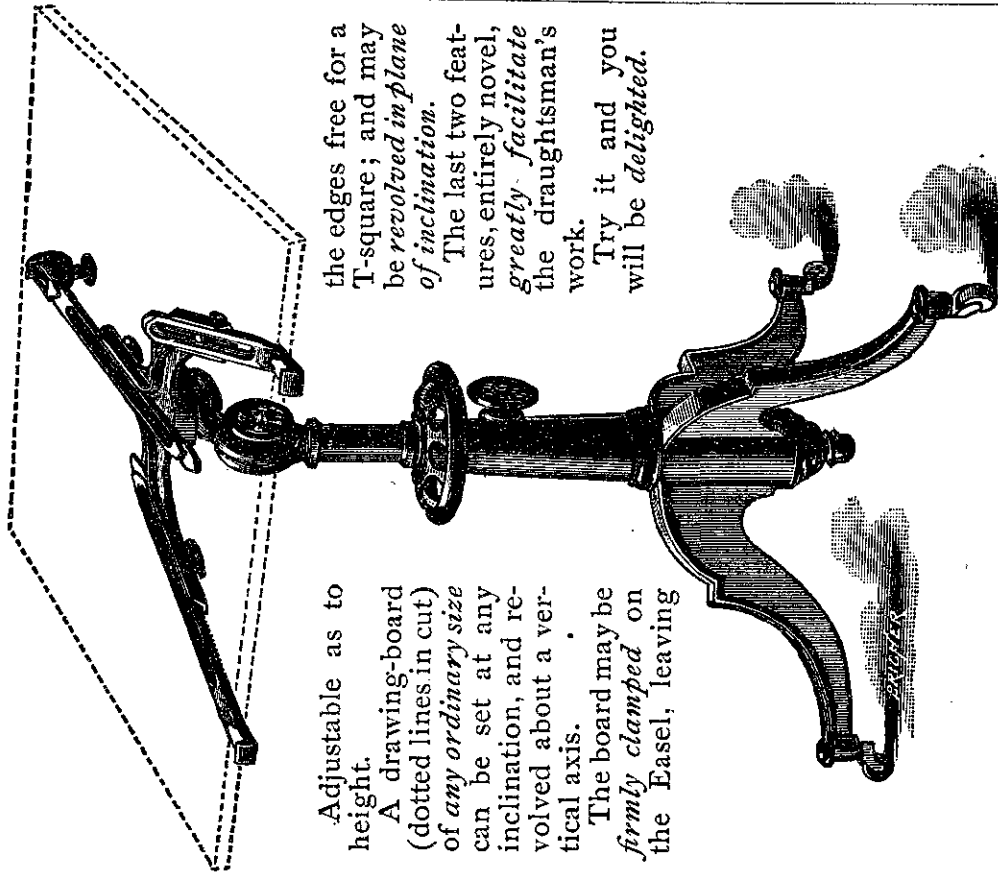
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Adjustable as to height.

A drawing-board (dotted lines in cut) of any ordinary size can be set at any inclination, and revolved about a vertical axis.

The board may be firmly clamped on the Easel, leaving

the edges free for a T-square; and may be revolved in plane of inclination.

The last two features, entirely novel, greatly facilitate the draughtsman's work.

Try it and you will be delighted.

Japaned and Neatly Ornamented, Price, \$10.00.

(Liberal discount to the Trade and Schools.)

EDWARD DUMMER,

Patentee and Sole Manufacturer,

Office, 82 WATER STREET, BOSTON, MASS.

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CALL AND EXAMINE THE LARGEST ASSORTMENT
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JAMES NOTMAN,

Photographer

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— AND —

HARVARD '80, '81, and '85.

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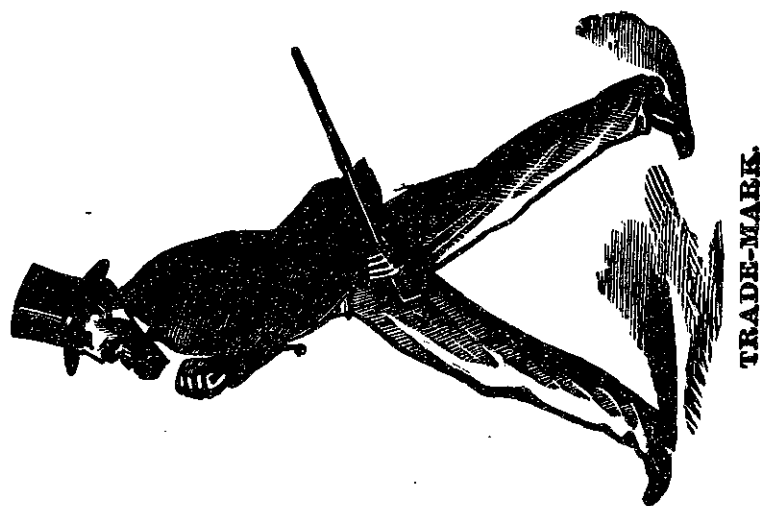
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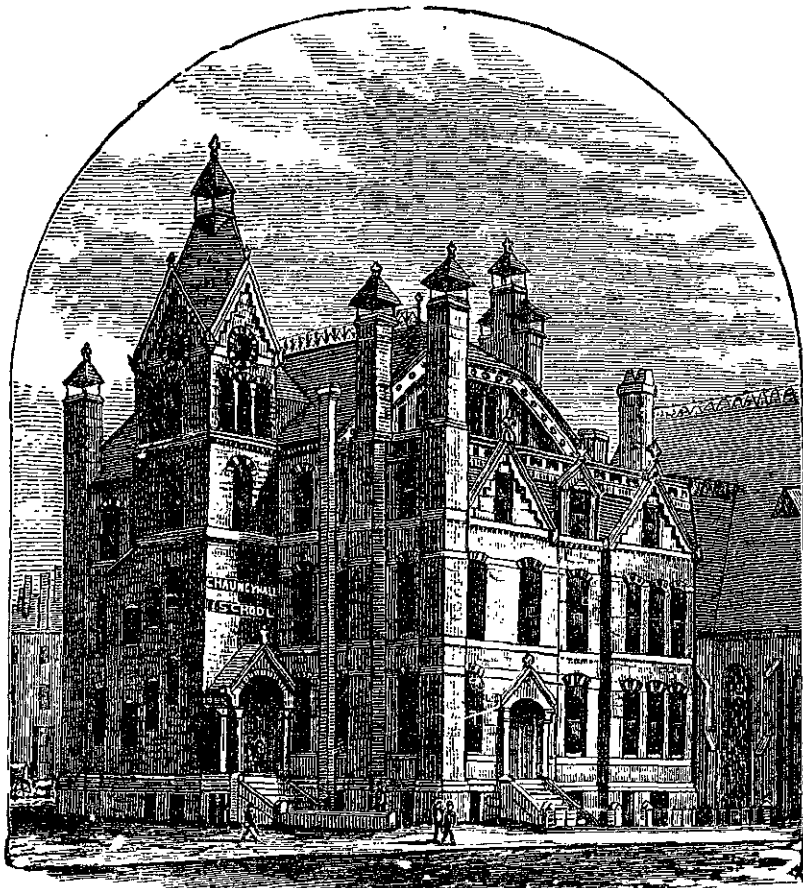
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